

Class 03

Topics

- Event Graph Basics
- Arrival Process as Event Graph
- Queuing Model
- Queuing Model by Hand

Reading

- Basic Event Graph Modeling

Event Graph Basics

- Represents state transitions and scheduling as graph
- State transitions are nodes
- Each arc is a scheduling relationship

Arrival Process as Event Graph

Parameter

- $\{t_A\}$ = Interarrival Times

State

- N = Cumulative Number of Arrivals

Event Graph



Discrete Event Simulation Modeling

Multiple Server Queue

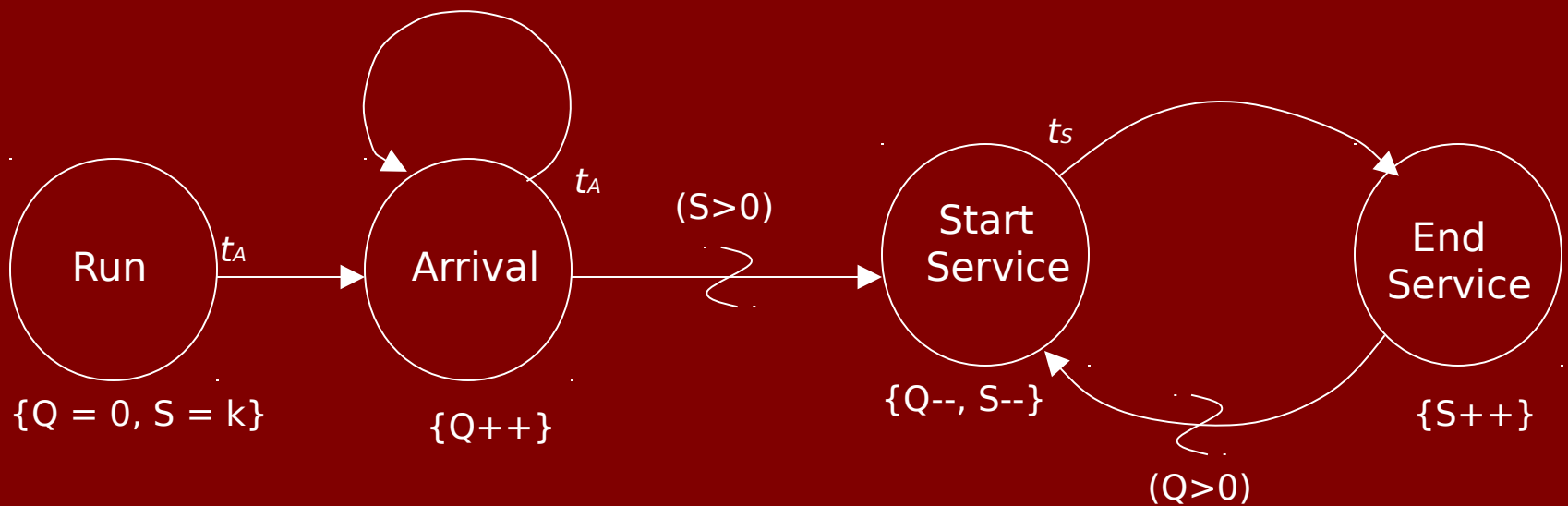
Parameters

- k = Total # servers
- $\{t_A\}$ = Interarrival times
- $\{t_S\}$ = Service times

States

- Q = # in queue
- S = # available servers

Event Graph



Discrete Event Simulation Modeling